



— Y-12 BULLETIN

A Newspaper For Y-12 Employees of Union Carbide Corporation—Nuclear Division

Vol. 22 — No. 6

OAK RIDGE, TENNESSEE

Wednesday, February 7, 1968

Crystal Plant Is Set In San Diego

A pioneer in the development and production of synthetic crystals for lasers, Union Carbide Corporation is expanding its facilities for the production of industrial crystals with the construction of a new plant at San Diego, California. The 43,000-square-foot manufacturing and research facility will be operated by the crystal products department of the corporation's Electronics Division and will be part of the new technical center established on a 22-acre site on Kearny Mesa, north of San Diego's Mission Valley.

According to Dr. Maurice A. Lynch Jr., general manager of the crystals products department, the San Diego facilities will include research and development activities as well as the production and special fabrication of industrial crystals, such as ruby rod and YAG (yttrium aluminum garnet) crystals for lasers and masers, and electro-optical crystals. This work is currently being carried on at both the Speedway laboratories in Indianapolis and at the crystals products plant in East Chicago, Indiana.

"The moving of our custom-crystal production facilities to new, expanded quarters will not only provide for the continued growth of this area of our business," Dr. Lynch explained, "but will also make possible the expansion at East Chicago of the manufacture of Linde Star sapphires and rubies that are marketed by the jewelry products department of Union Carbide's Consumer Products Division."

The new crystals products plant at San Diego will be adjacent to the 35,000-square-foot semiconductor plant.

Union Carbide Directors Declare 50 Cent Dividend

The board of directors of Union Carbide Corporation has declared a quarterly dividend of fifty cents (50¢) per share on the outstanding capital stock of the corporation payable March 1, to stockholders of record at the close of business February 2.

The last quarterly dividend was fifty cents paid December 1, 1967.

AEC's Living Lab Opens In Chicago

The Atomic Energy Commission's "Life Science Radiation Laboratory" will begin an appearance this week at the Chicago Museum of Science and Industry, in that Illinois city.

The exhibit, which features live demonstrations of radiation uses in research and development, was designed and built by Oak Ridge Associated Universities for the AEC. ORAU operates the AEC's domestic exhibits program including the American Museum of Atomic Energy in Oak Ridge.

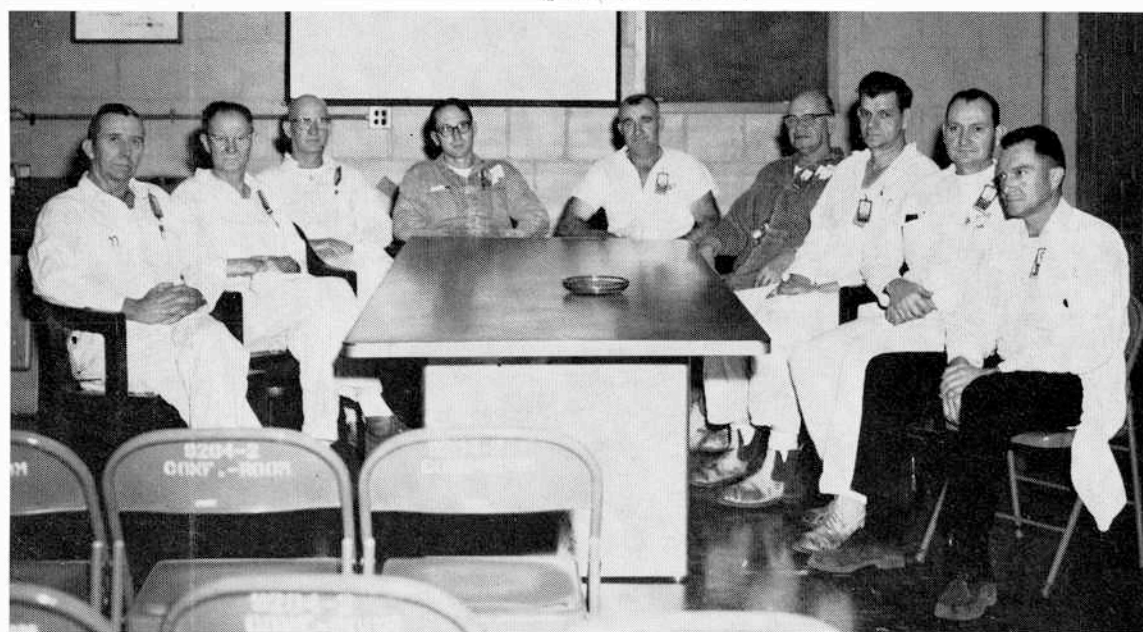
The exhibit, designed for extended showings in major cities, uses live animals, insects, fish and growing plants as well as inorganic materials to illustrate beneficial uses of radiation in medicine, agriculture and biology.

Aim of the program is greater public understanding of natural and man-made radiation and its increasingly important role as a research tool for probing life processes.

The exhibit is schedule to remain at the Museum in Chicago through August 31.

SEA LANES

Valor is traveling on an ocean liner without tipping. Discretion is coming back on a different ship.



PART OF BETA TWO FORMING, above, is very proud of the department's safety record for the past four years. The group has not had a single occupational medical treatment case since 1964 . . . and not a serious injury since 1963. Reading from left are J. T. Berry, J. F. Chamblee, T. P. Pride, L. Holbert, R. D. Bass, S. B. Underwood, W. A. Wells, B. W. Coward, and Foreman Jack Minton.

Argonne's MacFarlane Is Seminar Guest Friday

A joint Physics-Electronuclear Division seminar this Friday will feature M. H. MacFarlane, Argonne National Laboratory. His subject will be "The Coming of Age of the Shell Model."

The seminar is set for Friday, February 9, at 3:15 p.m. in the East Auditorium of ORNL's 4500 building.

Kudos To Y-12ers

Congratulations to Dan Stroud and Irv Speas. Stroud, Maintenance Division, was recently elected president of the Oak Ridge Country Club. Speas was named vice president. Irv is in Y-12's Engineering Division.

Beta Two Forming Operations Sets Enviably Safety Record

Beta Two Forming Operations, Metal Preparation Division, is justly proud of its safety accomplishments.

Since the department's formation on February 1, 1964, personnel have collected nearly half a million man-hours without a chargeable serious injury and a much higher total since the last disabling injury on March 21, 1962. (There were two disabling injuries in this operation in earlier years, before the department was given its present name, January 19, 1961 . . . and the one in early 1962.)

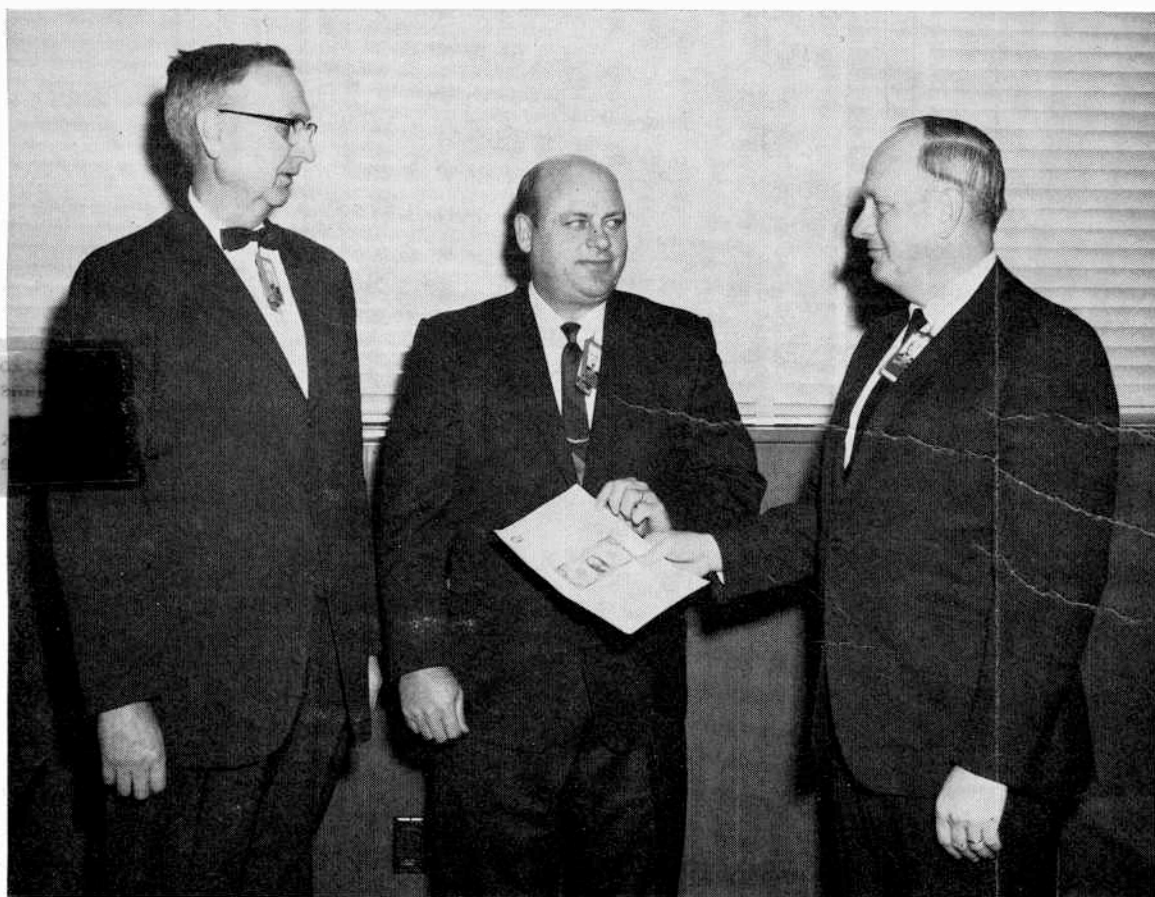
But, more important, Beta Two Forming has reduced all its injuries, serious and otherwise, through the years. There were 25

first aid cases, only minor injuries, in 1964, eight in 1965, three in 1966, and none whatsoever last year. The frequency reduction for these years ran 322, 122, 71, and zero . . . a most enviable feat, to be sure.

One group in Department 2694, under the supervision of Foreman Jack Minton, has not had a single occupational medical treatment case since 1964, or more than three years!

Men in Beta Two try to keep their safety record spotless. They know it is to their own advantage to work safely.

Congratulations to this group . . . and the entire department as a whole. They are setting an example the entire plant could well follow.



THE U.S. GOVERNMENT HAS FILED a patent application on the development "A Method of Producing High Purity-Low Density Beryllium." The process was developed by J. J. Asbury, Chemistry Development. He is congratulated above by L. M. Doney, left, and P. R. Vanstrum, right, technical director.

Surviving Spouse Option Explained

The Benefit Plans Office calls to the attention of Y-12's older employees the fact that they may elect a "Surviving Spouse Option" in the pension plan.

Surviving Spouse Option allows the spouse to receive one-half of the actuarially reduced pension benefits for life. It does reduce the employee's pension, but protects a surviving mate.

To be eligible for the 'surviving spouse option' an employee must have 10 years or more of company service with Union Carbide Corporation, and must be over age 54.

The option should be signed, however, before an employee's 64th birthday . . . or he may lose his eligibility.

The 'Surviving Spouse Option' election can be explained fully by the Benefit Plans Office. Questions concerning the pension plan should be referred to J. H. Marquiss or A. J. Hines, at extension 3-7382.

LOST MEMBERSHIP

The younger generation seems pretty bad, only after you have lost your membership in it.

Engineering's Hale Named To Chi Epsilon

Byron H. Hale, Civil and Architectural Engineering, was recently initiated as a charter honor member of the Tennessee Chapter of Chi Epsilon, the National Honorary Civil Engineering Fraternity. Chi Epsilon promotes Civil Engineering by recognizing and emphasizing the qualities of the successful individual professional engineer.

NEW PROBLEMS

Once we talked out our problems over cigarettes and coffee. Now they are our problems.

SAFETY SCOREBOARD

The Y-12 Plant Has
Operated
39 Days Or
1,081,000 Man-Hours
(Unofficial Estimate)
Through February 4
Without a Disabling
Injury
Safety At Home
At Work, At Play

The Bulletin

Published Weekly For The
Y-12 Employees Of
UNION CARBIDE
CORPORATION



NUCLEAR DIVISION

JAMES A. YOUNG *Editor*

Member Appalachian
Industrial
Editors Association

American Association Industrial Editors

OFFICE

Post Office Box Y
Oak Ridge, Tenn. 37830
Telephone 3-7100

Taft Complex Given Added Impetus

Union Carbide Corporation will build a new 50-million-pound a year dicyclopentadiene plant at its petrochemicals complex in Taft, Louisiana, 20 miles above New Orleans on the Mississippi. Production start-up is scheduled for 1969.

Dicyclopentadiene has been used extensively in the agricultural chemical industry where it is a major intermediate in the manufacture of pesticides. Other uses for this chemical are in the elastomer field and in the manufacture of cycloaliphatic epoxides for use in coatings resins applications.

The plant is designed to be expandable and will be a highly automated facility using unique Union Carbide-developed technology. The new technology will provide higher quality material than is currently available. Feedstock for the new plant will come from the complex at Taft and from other of the corporation's production facilities throughout the country.

Union Carbide has produced and sold dicyclopentadiene for many years. The new Taft plant, with all the economies inherent in large volume automated production, will permit the corporation to phase out older, less efficient facilities. Dicyclopentadiene produced at Taft will be used internally and for sale.

Hungarian Pianist Will Give Concert Saturday

Marta Vago, Hungarian-born pianist and rising star in concert circles, will perform in Oak Ridge Saturday, February 10, at 8:15 p.m. in the Oak Ridge High School auditorium.

Miss Vago's program, presented by the Oak Ridge Civic Music Association, will include Beethoven's Sonata, Opus 110; Bach's Italian Concerto; and other selected works by Chopin, Brahms and Bartok.

The young pianist is a Julliard School of Music graduate, and is currently teaching and accompanying in the New York area. She has given solo recitals at Julliard, and was soloist recently with the New Westminster Symphony Orchestra in Vancouver, B. C., Canada.

Keep Telephone Numbers Handy For Emergencies

When you need your doctor, the fire department or local police, chances are you may need any one of them in a hurry. Keep an easy-to-read, convenient telephone listing attached to, or nearby the telephone. This is an important safety provision particularly when others may be staying in your home.

Fear Of Dark Is Recommendation On Highways By Safety Council!

Is being afraid of the dark sissy? Not so, says the National Safety Council. They warn that more than half of all motor vehicle deaths occur at night . . . and that the death rate (death per million vehicle miles) is more than two and one-half times greater at night than it is during daylight hours.

With days relatively shorter at this time of year, and more truckers driving at night to avoid heavy daytime traffic, it pays to examine the problem and a few possible solutions.

1. Whenever possible try to avoid night driving — especially on unfamiliar roads.

2. Maintain your speed below ordinary daytime speeds for the same conditions. At 60 mph your stopping distance is greater than the range of your headlights. If you spot danger at night at high speeds, you don't have time to stop.

3. Visibility is vital. Keep your headlights clean and properly adjusted. Keep windshields clean both inside and out. Replace windshield wipers if they smear.

4. If you're tired—don't drive. It's true at any time of course, but at night, especially so. The hypnotic effects of headlights and the eye strain caused by poor visibility greatly magnifies the effects of fatigue.

5. Give yourself plenty of room between you and the vehicle in front. Even taillights can be deceptive. At night red lights seem to be farther away than they actually are. Take it into account, and leave yourself enough room to maneuver.

6. Watch out for erratic behavior in the vehicles in front of you as well as those to your rear. Being forewarned of potential trouble can often spell the difference between life and death.

7. When approaching headlights blind you . . . concentrate on the right shoulder of the road. This keeps your vision from the direct path of the approaching lights.

Afraid of the dark? You'd better be! cautions the National Safety Council.



'Febus tenet octo vicanos' . . . except in Leap Year, which is this year, when it has xxix! More Y-12ers celebrate important landmarks with Union Carbide Corporation. Congratulations!

20 YEARS

Delmer D. Woods, General Weld Shop, February 12.

15 YEARS

Milo A. Horton, Buildings, Grounds and Maintenance Shops, February 9.

Calvin G. Johnson, Buildings, Grounds and Maintenance Shops, February 9.

Royce L. Vanderpool, Research Services, February 9.

Joseph E. White, Ceramics and Plastics Development, February 9.

10 YEARS

Louise F. Beets, Laboratory Operations, February 10.



Riders wanted from Jefferson, West Outer Drive section, to East Portal, straight day. B. G. Roe, plant phone 3-7568, home phone Oak Ridge 483-1070.

Ride wanted from Ford Garage, Clinton, to West Portal, straight day. Mikey Duncan, plant phone 3-5301, home phone Clinton 457-9742.

Richard Wolny Gives Paper Before IMOG

Richard Wolny, Electrical and Electronics Department, is delivering a paper this week before the IMOG committee at the Savannah River Plant, Aiken, South Carolina. (IMOG — the Interagency Mechanical Operations Group.)

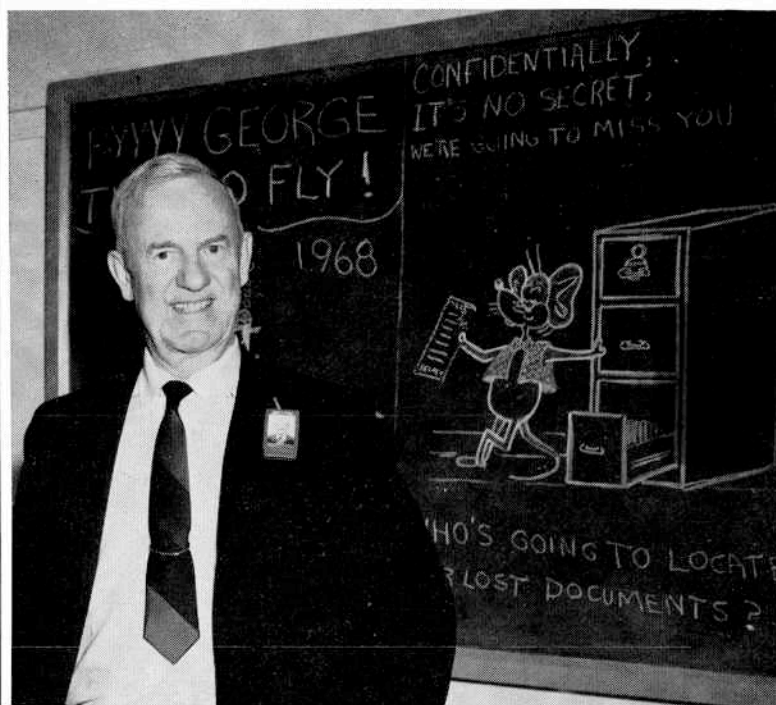
Wolny's paper, scheduled for delivery today, is entitled "Humidity and Moisture Controls in the Instrumentation Standards Laboratory."

Sell An Eskimo A Cool Refrigerator!

If there were any Eskimos at the north pole it would be possible to sell them refrigerators, according to the men who man the RCAF weather station at Alert—the settlement nearest the north pole. There, a large walk-in freezer has been installed to keep things warmer. Insulated with polyurethane, the freezer maintains appropriate "inside" temperatures in spite of outside temperatures which can drop to minus 60 degrees F accompanied by 100 m.p.h. arctic winds.

Pigott, McFarland Added To January's Retirements

6-13758



Charles L. Pigott

January retirements, continued from last week, included two long-time Y-12ers, Charles L. Pigott and Elmore P. McFarland. Pigott, head of the SS Control Department, elected early retirement; as did McFarland, Process Maintenance.

Charles L. Pigott, supervisor of the SS Control Department, is a native of Murphysboro, Illinois. He came to Y-12, however, back in early 1944 after his discharge from the U. S. Army Air Corps.

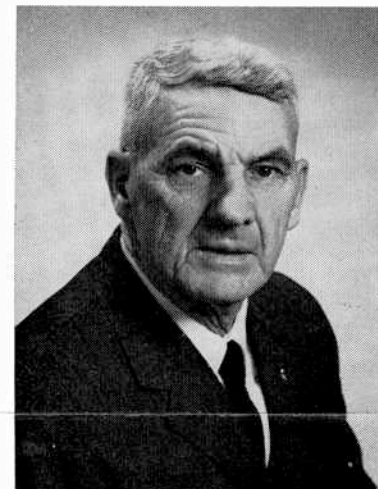
Charlie served some state-side duty with the Air Corps at Phoenix before coming to East Tennessee. Prior to his service years, he had worked with the State of Illinois, Carbondale, with the Civil Works Administration, Murphysboro; with the Illinois Emergency Relief Committee, and the Federal Works Administration, Herrin, Illinois.

A bachelor, Pigott is reputed to be one of the best dancers in the plant. He lives at 111 East Maiden Lane, Oak Ridge, and plans to continue using Oak Ridge as headquarters. Some trips are in the planning stages, but Charlie says he plans to take retirement as it comes.

Pigott reported to Y-12 June 5, 1944, almost 24 years ago.

The other early retirement for the end of January was Elmore P. McFarland, Process Maintenance.

Born in Corbin, Kentucky, McFarland spent his early youth



Elmore P. McFarland

with the Virginia Jellico Coal Company. He also worked with the High Point Coal Company, Caryville, and the Louisville and Nashville Railroad, Louisville, before coming here September 17, 1952.

Married to the former Edith Douglas, McFarland lives at 118 Robin Lane, Oak Ridge. The McFarlands have two sons Sgt. Bob McFarland in Viet Nam (his wife and three children are living in Texas) . . . and Pascal, in Randleman, North Carolina. There are five daughters Mrs. Patsy Mounts and Arlene McFarland, Vinton, Virginia; Mrs. Anna Wheeling, Knoxville; Mrs. Norma Shorters, Virginia Beach, Virginia; and Mrs. Sarah Smith, Memphis. Counting the three Texas grandchildren, there are 15 in all.

Trips to Texas and Virginia to visit the kids are immediate plans for the McFarlands.

He plans to remain in Oak Ridge, and hopes to find more time to fish and do the things he's always wanted to do.

The best of luck to January's two additional retirements.

Instrument Society Meet Is Set Today, February 7

The monthly meeting of the Oak Ridge Section of the Instrument Society of America will be held tonight, Wednesday, February 7, at the Regas Restaurant, Knoxville. The social hour begins at 6 p.m., with dinner at 6:45.

D. M. Steelman, system application engineer, Leeds and Northrup, will speak on "The How and Why of Direct Digital Control." The talk will be devoted to describing present L & N DDC concepts for executing first level control. Additionally, the idea of second level control will be discussed.

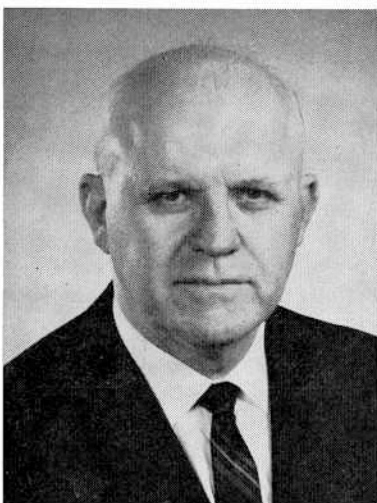
INSTALLMENT BUYING

A charge account has been defined as a means of buying what you can't afford tomorrow while you are still paying for what you bought yesterday.

Washington's Birthday To Come One Day Late

Y-12ers will celebrate George Washington's birthday a little late this year . . . one day late. The second official holiday for Y-12ers for the new year will be Friday, February 23, rather than Thursday, February 22. All existing standard practices and procedures will be applicable to February 23 as the recognized plant and calendar holiday.

This will afford employees a long week-end in February.



DAN ZEHNER, before and after. Dan, in the top picture, who retired January 31, says the lower photo is what he looked like before he came to Y-12. (Well, it was a long time before, too.) The lower photograph was Dan's christening picture, made in 1905. The little gown was worn by Dan's two grandsons at their christenings, too.

Basketball Nears End Of First Half

Basketball action opened last week as the Y-12 Atoms defeated the Chargers Monday, 35 to 30. Don Forrester scored 18 for the winning Atoms; Tim Butler, 10.

Ray Leffler led the Chargers, with nine; Don Fearee scored eight.

The Bombers belted the Sharp Shots in the second game 65 to 32 . . . as Jim Shoemaker scored 16; Bob Alred 14.

Ed Baillif led the Sharp Shots with 15 points.

Final play Monday saw the Combustion team edge by the TK's 43 to 42. The TK's led until the last quarter, when the Combustions pulled ahead, holding their opponents to only two points. Wallace Johns scored 16 for the winners, Dick Hudson, 19, for the losers.

Y-12's improving Atoms picked up their second win of the week by dropping the Falcons 47 to 37 . . . as Jim Williams poured 27 big points through the hoop for the winning team.

Churchill Moore, as usual, led the Falcons with 15 points.

The Health Physics team took their ninth victory of the season, scoring 65 points to 50 for the Bombers. Jim Carter carried scoring for the HP combo with 23 points; Larry Finch, 20; and Jim Treadwell, 12. Two Bombers got in double figure scoring as Bob Alred rallied with 23, Bud Lewis, 10.

The TK's took the Sharp Shots 55 to 31, as Rick Hudson racked 17 big points through and Jerry Goddard got 10.

For the SS crowd it was Dan Ramey with 14.

An extra game thrown in Wednesday saw the Combustion team win over Radioisotopes 40 to 33.

Curt McGinnis scored nine for the winners. . . . Toby Mitchell, Charles Kirkpatrick and Wallace Johnson scored eight.

For the losers it was Joe Crunk, Jim Gibson and Dave Smiley, each with six.

League standings follow:

Team	W	L
Health Physics, ORNL	9	0
Bombers, ORNL	9	1
Eagles, Y-12	8	2
TK's, ORNL	6	3
Combustion, ORNL	5	4
Chargers, Y-12	5	5
Atoms, Y-12	4	5
K-25 Falcons	3	7
Radioisotopes, ORNL	2	7
Sharp Shots, ORNL	1	9
Bat Boys, Y-12	0	9

No investment pays better dividends than safety.

Rounders Keep C Bowling Top Rung

The Rounders apparently relish the top rung in C Bowling League standings. They won four last week from the Royal Flush, and staying right up there with them, the Parbusters pelted the Rodders for the same score.

Three big points went on the scoreboards as the Sunflowers bested the Rollmasters and the King Pins kayoed the Big Five. Sharing two it was the Badgers and Fireballs . . . the HiLifers and the Invalids.

C. R. Lively, Fireballs, rolled big highs in singles, 222 scratch, 250 handicap. His 574 scratch series was only one pin above Red Hulsey's. Joe Beever, Parbusters, put a new season high on the boards and a high for anyone in series when he rolled a 712 handicap count!

The Badgers were best in singles with 951 scratch . . . the Fireballs put handicap highs on the boards . . . 1081 singles (a new high) and series of 3019. The Rounders rolled high series in scratch counting, 2597.

Team	W	L
Rounders	14	2
Parbusters	12	4
Sunflowers	11	5
Badgers	9	7
Fireballs	8	8
HiLifers	7	9
Royal Flush	7	9
Rodders	6	10
Rollmasters	6	10
Big Five	6	10
Invalids	6	10
Kings Pins	4	12

All Stars Win Classic Roll-Off

The All Stars defeated the Has Beens for top positions in the Classic Bowling League's first half last week. The two teams had tied for the first-half championship, and the roll-off, which determined the winners, was held last Wednesday, January 31.

The All Stars rolled a total of 3010 pins, compared with the Has Beens' 2913. (Roll-off games are decided by total pins.)

The Has Beens won game number one 1002 to 949 pins, but turned and dropped the next two, big enough to give the All Stars the victory.

Bobbie Rutherford, Has Beens, rolled high in series . . . 562 scratch, 667 handicap. His 255 single handicap game was high also. Tom Pappas, All Stars, aced a 221 single scratch game.

Thus the All Stars will be in the league championship roll-off set for later in the Spring.



THE MOUNTAINEERS are a Y-12 threatening team in Volleyball action, every Thursday night. In the front row, from left, are Jack Roach, D. H. Johnson, and Dave Smiley. In the rear are Larry Brown, Ron Klueh, Bill Elmer and Kerry Mauldin. Buck Carr was not present when the photo was made . . . and Johnson is the team captain.

Table Tennis Sees Action Pick Up

Action in the X Table Tennis League saw leader Geoffrey Newman idle, with activity restricted to other players. Herve Derrien downed Loyd Wyatt for three games. . . . Herb Mook took two from him. Derrien also defeated Keyes for two. . . . Roy Huddleston downed Jerry for three.

X League standings:

Player	W	L
Geoffrey Newman	20	1
Loyd Wyatt	15	9
Bill Motley	13	11
Herb Mook	12	12
Herve Derrien	12	12
Roy Huddleston	11	13
Bill Foutz	6	15
Jerry Keyes	4	20

Gordon Brewer won a three-game forfeit sweep from Bob Brown. Bob Coveyou defeated Ed Gambill in play . . . Al Norris took two from Rukuro Oyamada. Gambill defeated Oyamada for three and Francois Kertesz for the full count.

Y League standings:

Player	W	L
Gordon Brewer	20	4
Bob Coveyou	19	5
Al Norris	14	10
Paul Kasten	12	9
Ed Gambill	10	8
Art Weinberger	5	4
Fred Wetzel	8	7
Francois Kertesz	7	14
Rukuro Oyamada	7	17
Bob Brown	0	24

Z League play saw Bob Smith take three from Ken Toth . . . and Dave Allen. A. B. Meservy won two from Joe Lewin . . . and Allen won three from Winfred Collins.

Z League standings:

Player	W	L
Bob Smith	20	1
Joe Lewin	13	5
Bill Hackett	11	7
A. B. Meservy	10	8
Dave Allen	6	12
Ken Toth	0	3
Tudor Eoyd	0	6
Winfred Collins	0	18

Pistol League A-Forming, First Shots Are Tuesday

The Oak Ridge Sportsman's Association is sponsoring a 10-matching pistol league, beginning Tuesday, February 13. The matches will continue through April 16.

Y-12ers wishing to fire in the .22 caliber pistol matches may get additional information concerning the league through Tom Lemons, telephone 3-9209.

Recreation



Saturday, February 10

GAME TIME: 7:30 p.m. Green Room, Ridge Recreation Hall. 18 Games \$1.50. Sponsored by E, F, G, H and J Shifts. All Y-12ers welcome!

Monday, February 12

BASKETBALL: Beginning 6:00 p.m. Oak Ridge High School Gym. K-25 Falcons vs. TK's; Bat Boys vs. Sharp Shots; Chargers vs. Radioisotopes.

TABLE TENNIS: 7 p.m., Oak Ridge Wildcat's Den.

BOWLING: C League, 5:45 p.m., Ark Lanes.

PHYSICAL FITNESS: (For Women) 7:30 p.m. Oak Ridge High School Girls' Gym.

Tuesday, February 13

PHYSICAL FITNESS: 7:30 p.m. Oak Ridge High School Gym.

CAMERA CLUB: 8 p.m. First United Presbyterian Church.

BASKETBALL: Beginning 6:30 p.m. Robertsville Junior High School. Atoms vs. K-25 Falcons; Bat Boys vs. Eagles; Combustions vs. TK's.

Wednesday, February 14

BASKETBALL: Beginning 6:30 p.m. Oak Ridge High School Gym. Bombers vs. Combustion; Atoms vs. Health Physics; Eagles vs. Chargers.

BOWLING: Mixed League, 8 p.m. Ark Lanes.

Thursday, February 15

BOWLING: Classic League, 5:45 p.m. Ark Lanes.

BADMINTON: Informal Play, employees and spouses, 7:30 p.m. Jefferson Junior High School Gym.

VOLLEYBALL: Beginning 6:30 p.m. Court A: K-25 Gashouse Gang vs. Mix-Ups; Dirty Half-Dozen vs. Ecobums; Old Men vs. Set-Ups. Court B: Mountaineers vs. Beavers; Neophytes vs. K-25 Hawks; Charley Browns vs. Naughts.

Friday, February 16

BOWLING: 4:30 p.m. Dead-line for entering Y-12 Tournament set for March 4, 5.

Plug security leaks.

Sweeping Wins Mark Volleyball

Clean sweeps marked the scores of last week's Volleyball play as each winner took the full count of four games. On Court A the Old Men demolished the Neophytes 15-4, 15-7, 15-8 and 15-1. The Beavers bested the Charley Browns 15-2, 15-5, 15-3, and 15-2. The Set-Ups sank the Naughts 15-7, 15-9, 15-10, 15-7.

Court B's action saw the Ecobums erase the Mix-Ups 15-4, 15-8, 15-2 and 15-7. The K-25 Hawks conquered their plantmates, the Gashouse Gang 15-9, 15-7, 15-4 and 15-3. The Dirty Half Dozen mugged up the Mountaineers 15-10, 15-7, 15-9 and 15-5.

Team	W	L
Beavers, Y-12	35	1
Old Men, ORNL	30	6
Ecobums, ORNL	29	7
Set-Ups, ORNL	28	8
Dirty Half Dozen, ORNL	27	9
K-25 Hawks	21	15
Mountaineers, Y-12	11	25
Naughts, ORNL	10	26
Neophytes, Y-12	9	27
Charley Browns, ORNL	7	29
K-25 Mix-Ups	5	31
K-25 Gashouse Gang	4	32

Mixed Alley Lead Shared By 2 Teams

The Roses 'N Thorns moved up to tie the Mustangs in the Mixed Bowling League last week. The R 'N T team took four from the Hits & Misses, as the Mustangs mustered three from the McSprays.

The Goofers gained four from the Twisters, and the Alley Cats rolled past the Rollers by three.

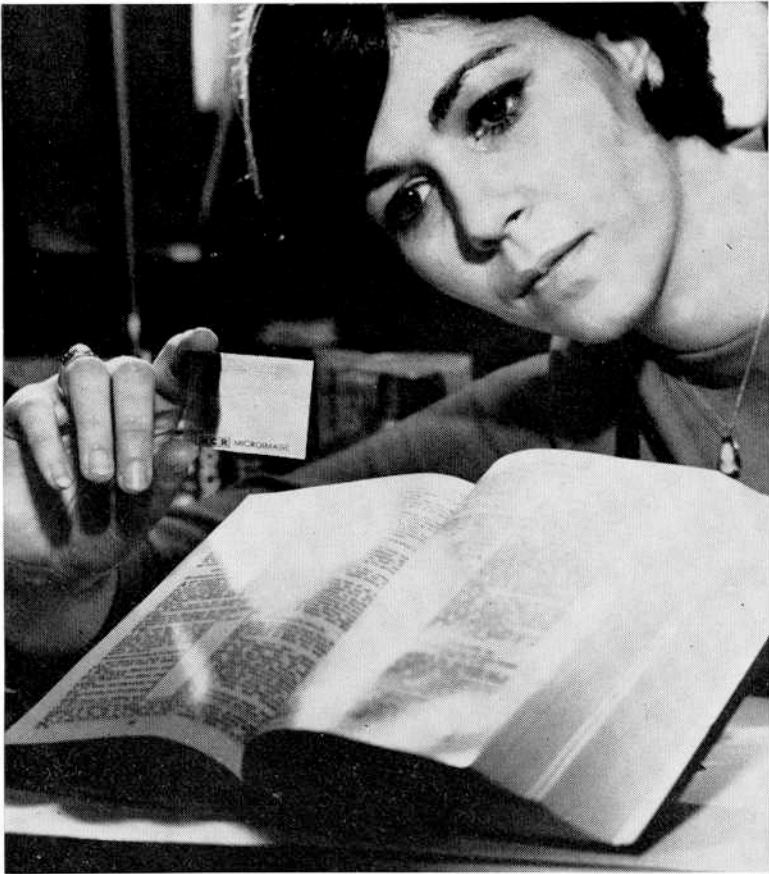
Bob Forseman, Mustangs, and Larry McLaughlin, McSprays, rolled a 191 scratch game each. Larry's 235 handicap single was high . . . and Bob's series of 531 scratch, 597 handicap were high. Joyce Gillihan, Rollers, posted highs for females . . . singles of 166 scratch, 206 handicap . . . series of 462 and 582.

The Mustangs rolled high singles . . . 625 scratch, 768 handicap. Their 1791 scratch series was high; while the Alley Cats rolled a 2231 handicap series.

Team	W	L
Mustangs	15	9
Roses 'N Thorns	15	9
Rollers	14	10
Hits & Misses	12	12
McSprays	11	13
Twisters	10	14
Goofers	10	14
Alley Cats	9	15



MUSKIES — MUSKIES — MORE MUSKIES. J. C. Bryan, Chemical Services, is the latest Y-12er to turn this beauty into the annual fishing contest. (Anglers are reminded that there are other categories in the plant-wide race.) Naturally, Bryan caught this one in Norris Lake on a Cisco Kid, naturally.



BIBLE ON MICROFILM — This young lady is looking at one Bible while another lies open before her. She's looking at a strip of microfilm less than two inches square, which contains 773,746 words — the whole Bible. This Bible, probably the world's smallest, demonstrates a new technique developed by National Cash Register scientists by which vast amounts of information are recorded and stored microscopically. The new technique, based on micro-optics, will be seen on "The 21st Century" telecast, "Now You See It," Sunday, February 11 at 6 p.m., EST, over the CBS Television network. (The program is carried locally by WBIR-TV, Channel 10). CBS News Correspondent Walter Cronkite is principal reporter for the series, which is sponsored by Union Carbide Corporation.

Electro-Optics, 'Now You See It' Is Subject For '21st Century' TV Show

The Bible, 1,245 pages, 773,746 words recorded on a microfilm less than two inches square—and the inside of a living heart will be seen in "The 21st Century" report on electro-optics. The "Now You See It," TV show will be shown next Sunday, February 11, at 6 p.m., EST, in color over WBIR-TV. CBS News Correspondent Walter Cronkite is principal reporter for the series which is sponsored in the public interest by Union Carbide Corporation.

Electro-optics, an emerging technology, is already providing the basis for new industries in the 21st century. It is a result of a marriage between the ancient science of optics and the dynamic new science of electronics.

Micro-optics which can reduce books to tiny squares of microfilm, or the 13 million volumes in the Library of Congress to six small filing cabinets, will be demonstrated. The new system of information recording uses ultraviolet light on microfilm. The recording must be read with a microscope.

Probing a living organ to examine it has been made possible by the development of fiber-optics. The fiber-optic probe that explores a working heart twists and turns through arteries to reach its objective and carries a perfect picture that seems to violate the old law that says "light can travel in straight lines only."

The electro-optical system that Surveyor I used to photograph the surface of the moon will be demonstrated. The pictures to be shown are considered by space scientists to be among the "most significant photographs of the century."

A new lens polishing system that chips away an atom of glass

at a time will be seen in operation. The lens polisher uses a beam of atomic ions which are shot at the lens until the proper tolerances are achieved.

The new technique of taking pictures of heat variations—thermograms—will be demonstrated in the diagnosis of breast cancer. Experts predict that thermography will eventually become an important medical and industrial tool, but point out that its present state of development is about that of the X-ray at the turn of the 20th century.

A laser television camera that can take pictures in the dark will also be seen. One of its future uses may be to photograph the dark side of the moon.



ROBERT ALLEN STOOKSBURY was born January 11 at St. Mary's, Knoxville, the son of Mr. and Mrs. Gary A. Stooksbury. Grandparents are the John Stooksburys and the J. V. McCoy's. McCoy is in Y-12's Beta Four Forming.

Rebels, Pinbusters Tied For Alley Top

The Rebels and Pinbusters are locked at the top of the Classic Bowling League after last week's action. The Pinbusters plastered the Rippers for four, while the Rebels routed the Splinters for three. Winning three it was the Eagles over the Eightballs and the Tigers past the Smelters. Sharing two were the Cubs and Playboys and the Bumpers and Markers. Two and one-half points went to the Screwballs over the All Stars.

Jim McLain, Smelters, rolled a 237 scratch single. . . . Jim Bartholomew, Markers, marked a 269 handicap single. Bartholomew's series of 600 scratch, 702 handicap were high.

The Rebels swept the board in team honors . . . singles of 966 scratch, 1072 handicap . . . series of 2640, and 2958.

League standings follow:

Team	W	L
Rebels	16	3
Pinbusters	16	8
Markers	15½	8½
All Stars	14½	9½
Playboys	14	10
Bumpers	13	11
Eagles	13	11
Rippers	12½	11½
Splinters	12	12
Eightballs	12	12
Swingsters	12	12
Has Beens	11	13
Tigers	9½	14½
Cubs	9	15
Screwballs	7	17
Smelters	5	19

'Archeology' Theme Camera Club Meet

"Problems in Photography in Archaeology" will be discussed by Jack East, amateur archaeologist, at the Carbide Camera Club's February meeting. It is set for next week, Tuesday, February 13, at 8 p.m. in the Fellowship Hall of the First Presbyterian Church, Oak Ridge. East will illustrate his lecture with color slides demonstrating his technique for including up to four different views of an object on a single slide.

Prints and slides for the February competition "Shadows" will be judged. In the work submitted, either the shadows or the shadow area must be the center of interest.

President Bill Harper announces that three of the nine members earning the highest number of points in monthly competitions during the 1967 season are Y-12ers. They are Dick Sladky, who placed first in color slides division; Bill Harper and Anna Dobbins, who placed second and third, respectively, in the color prints category. Other high point winners were Peggy Turner, Bill Russell, and Lee Andrews. Biology Division; and Bob Stone, Dick Lorenz and Joe Dedrick, all from ORNL.

Alarm Box Position Should Be Remembered

It is important for you to know the nearest alarm box in relation to your home. Then you would know how to use it. For a fire, open the glass door by the handle and then pull down the hook which rings the alarm at the firehouse. Stay nearby or have someone stay at the alarm box to direct the firemen to the fire. Check the alarm box located nearest to your home today. Read the instructions so you will know how to operate it, day or night, if the need arises. Remember, you can't always count on being able to phone the fire department. You may be blocked away from the telephone by fire.

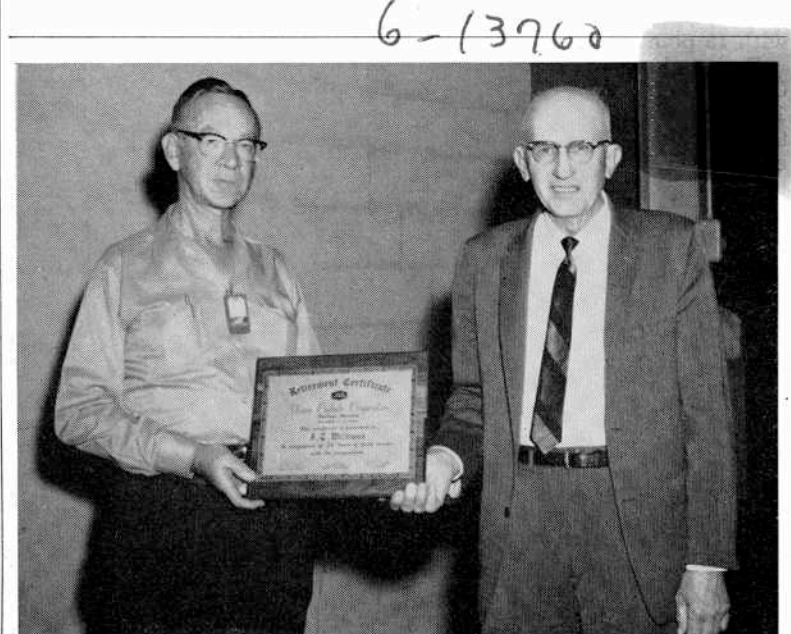
Say it with safety and save the flowers.



UNION CARBIDE CORPORATION
NUCLEAR DIVISION
P. O. BOX Y, OAK RIDGE, TENNESSEE 37830

(RETURN POSTAGE GUARANTEED)

BULK RATE
U.S. Postage
PAID
Oak Ridge, Tenn.
Permit No. 71



E. F. DYKES, BUILDINGS, GROUNDS and Maintenance Shops, presents J. T. Williams with a handsome plaque saluting his more than 24 years service with Union Carbide Corporation. Williams, who elected early retirement, lives at Route 5, Lenoir City.



N. K. BERNANDER, QUALITY CONTROL, congratulates Charles L. Pigott on his retirement last week, after more than 23 years of loyal service to Union Carbide Corporation. Pigott, head of the SS Control Department, took early retirement January 31.

Most Of Fire's Victims Are Killed In Home

More than half of each year's fire victims are killed by fires in the homes — more than those killed by all other fires combined. The yearly dollar cost to American homeowners is in excess of \$300,000,000. But facts and figures can't describe the heartache of injury—sometimes death—which fire may bring.

Leaking Gas In Home Can Spell Big Trouble

Leaking gas has a distinct odor and can be dangerous. Check all gas appliances to see that they are properly shut off. Do not strike a match. Open windows and doors immediately to ventilate area. If odor still persists phone your local gas company and get out of the house. If bottled gas is used, get your serviceman to show you how to close the outside shut-off valve.

Correcting Minor Things Can Avoid Accidents

Around the plant, like around your house, you often notice things that aren't right. Such things in the plant could be worn wiring on your machine, materials improperly piled and extending into aisles. Soft drink bottles left anywhere and not replaced in cases are a hazard. Any loose object left lying around represents a danger to others. And it might be that you see a light burned out, oil or water leaking on the floor, a slippery icy area in the parking lot. Hazards of this type cause accidents. If the item is minor and you are qualified to correct it don't pass it by. Correct it and, if necessary, report it. When time or technical assistance are involved let your foreman or supervisor know about it. He will assign the necessary help to render the condition safe.

Think before you talk.